AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings of claims in the application:

Claims 1-9 (canceled)

Claim 10 (currently amended): A method of screening for one or more compound which affect mRNA stability comprising the steps of: i) contacting a DNA expression system with at least one test compound under conditions whereby, in the absence of the test compound, said DNA expression system expresses a protein having a detectable signal, wherein the mRNA which is transcribed from said expression system and encodes said protein comprises at least one copy of a heterologous mRNA instability sequence from c-myc comprising one or more coding region determinant (CRD) or a fragment thereof comprising at least eight contiguous nucleotides;

(ii) measuring said detectable signal; and (iii) comparing the measured detectable signal with a control, wherein a decrease in the measured detectable signal compared to said control indicates a compound that decreases mRNA stability and an increase in the measured detectable signal compared to said control indicates a compound that increases mRNA stability.

Claim 11 (previously presented): The method according to claim 10, wherein said control comprises measuring the detectable signal from the DNA expression system in the absence of said test compound.

Claim 12 (previously presented): The method according to claim 10, wherein said control comprises contacting a control expression system capable of expressing a second protein having a second detectable signal with the test compound and measuring said second detectable signal.

Claim 13 (original): The method according to claim 10, wherein said compounds are being screened for their ability to induce mRNA degradation, and wherein a decrease in the

measured detectable signal compared to said control indicates a compound that induces mRNA degradation.

Claims 14-17 (canceled)

Claim 18 (currently amended): A high throughput method for screening libraries of compounds to identify compounds that affect the stability of mRNA comprising: (i) inoculating wells of one or more multi-well plates comprising a growth medium with a stably transfected cell line comprising a DNA expression vector, which in the absence of a test compound expresses a protein having a detectable signal, wherein the mRNA which is transcribed from said expression vector and encodes said protein comprises at least one copy of a heterologous mRNA instability sequence from c-myc comprising one or more coding region determinant (CRD) or a fragment thereof comprising at least eight contiguous nucleotides; (ii) maintaining said one or more multi-well plates under conditions that allow cells of said cell line to grow and express said protein having a detectable signal; (iii) contacting the cells with one or more test compound; (iv) measuring said detectable signal; and (v) comparing the measured detectable signal with a control; wherein a decrease in the measured detectable signal compared to said control indicates a compound that decreases mRNA stability and an increase in the measured detectable signal compared to said control indicates a compound that increases mRNA stability.

Claims 19-25 (canceled)

Claim 26 (previously presented): The method of claim 10, wherein said heterologous mRNA instability sequence is inserted into the 3'UTR of the gene encoding the protein having a detectable signal.

Claim 27 (currently amended): The method of claim [[23]]10, wherein said heterologous mRNA instability sequence further comprises DNA corresponding to the regions that flank said CRD or fragment thereof in the ~~naturally occurring source~~ c-myc gene or mRNA.

Claim 28 (previously presented): The method of claim 27, wherein said heterologous mRNA instability sequence is inserted into the 3'UTR of the gene encoding the protein having a detectable signal.

Claim 29 (previously presented): The method of claim 10, wherein said protein having a detectable signal is an enzyme.

Claim 30 (previously presented): The method of claim 29, wherein the enzyme is luciferase or β-galactosidase.

Claim 31 (previously presented): The method of claim 29, wherein said protein having a detectable signal is a fluorescent or phosphorescent protein.

Claim 32 (previously presented): The method according to claim 18, wherein said control comprises measuring the detectable signal from the stably transfected cell line in the absence of said test compound.

Claim 33 (previously presented): The method according to claim 18, wherein said stably transfected cell line comprises a second DNA expression vector capable of expressing a second protein having a second detectable signal, and wherein said control comprises measuring the second detectable signal.

Claim 34 (previously presented): The method according to claim 18, wherein said compounds are being screened for their ability to induce mRNA degradation, and wherein a decrease in the measured detectable signal compared to said control indicates a compound that induces mRNA degradation.

Claim 35-36 (canceled):

Claim 37 (previously presented): The method of claim 18, wherein said heterologous mRNA instability sequence is inserted into the 3'UTR of the gene encoding the protein having a detectable signal.

Claim 38 (currently amended): The method of claim 35, wherein said heterologous mRNA instability sequence further comprises DNA corresponding to the regions that flank said CRD or fragment thereof in the ~~naturally occurring source~~ c-myc gene or mRNA.

Claim 39 (previously presented): The method of claim 38, wherein said heterologous mRNA instability sequence is inserted into the 3'UTR of the gene encoding the protein having a detectable signal.